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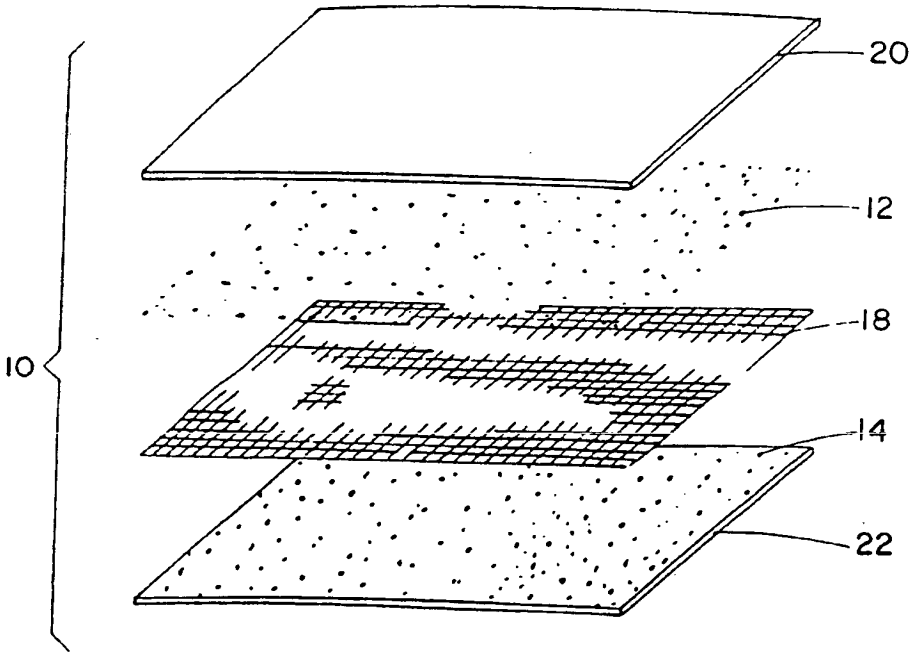
(54) Title: CONTROLLED OXYGEN/ANTI-MICROBIAL RELEASE FILMS

(57) Abstract

A film for releasing at least one of an antimicrobial agent, oxygen, and a medicament inlcudes a flexible, porous layer (18) such as a woven, non-woven, or knitted cloth or a layer of open cell foam. A first dry reagent (12) and a second dry reagent (14) which react in the presence of a dilutant to form the antimicrobial agent, oxygen, or medicament attached to the flexible, porous layer. In one preferred embodiment, the two dry reagents are disposed on opposite sides of the flexible, porous layer such that the flexible porous layer keeps the two apart and prevents a premature reaction. Porous outer layers (20, 22) prevent the powdered reagents from being wiped off while permitting dilutant access. In a preferred embodiment, the powdered reagents include acetylsalicylic acid and a perborate which react in the presence of water to generate peracetic acid (an antimicrobial agent which breaks down in a matter of minutes to hours into oxygen) and salicylic acid (a topical keratotic). The rate at which the reaction occurs and the peracetic acid breaks down into oxygen is controlled by buffering the pH of the powdered reagents, by selectively micro-encapsulating the powdered reagents, by controlling the porosity of the layers, or the like. Optionally, surfactants, detergents, emollients, gels, and the like can be added to the dry reagents. Alternately, a single reagent which releases oxygen



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